

The berm system as described may also be used as storage bins for bulk storage, walls for small low buildings, ditching or ditch liners, diversion dams, light duty retaining walls, and flood or run off water diking or diversion.

It is recognized that one skilled in the art will perceive other embodiments and variants in the spirit and nature of the invention. It is intended that such embodiments and variants are included within the monopoly extended by patent.

The embodiments of the invention in which an exclusive property right or privilege is claimed are defined as follows:
I claim:

1. A materials retaining berm system comprising:

- a. at least three elongated panels each having a top edge, bottom edge, first and second faces, first and second ends, and first and second joining hooks located on the first face at said first and second ends; and
- b. said joining hooks further comprising a portion fixedly attached to and extending from said first panel face and an essentially flat surface portion fixedly attached to the distal edge of said extending joining hook portion and spaced apart from and parallel to said first panel face thereby forming a pocket for receiving a joining clip; and
- c. at least three joining clips for removably joining two said panels, said joining clips having first and second slots, each adapted to engage said extending portion of the joining hooks of adjacent panels and to occupy said pocket; and
- d. whereby said panels connected by said joining clips define an enclosed space for retaining materials therein.

2. The materials retaining berm system of claim 1 further comprising a flexible liner conforming approximately to the shape of said enclosed space, said liner being attached to said upper edges of each panel by at least one elastic clip, and where said attachment extends substantially along the entire upper edge of said panel.

3. The materials retaining berm system of claim 1 further comprising a joining clip adapted to join adjacent panels at an angled arrangement, where the said joining clip comprises two essentially flat portions each containing a slot adapted to engage said joining hooks of adjacent panels, said flat portions connected together at an dihedral angles, where said joining clip is adapted to join adjacent panels at a angle.

4. The materials retaining berm system of claim 1, said panels further comprising of at least one elongated hole near said top edge for carrying and manipulating the panel.

5. The materials retaining system of claim 1, further comprising a support attaching means fixedly attached to said first panel face, said support attaching means comprising two opposing hook having essentially flat portions spaced apart from and parallel to said first panel face thereby defining a T shaped keyway adapted for receiving a cooperating T shaped portion of a support bracket.

6. The materials retaining berm system of claim 1 further comprising a joining clip adapted to join adjacent panels in approximately co-linear arrangement, where the said joining clip is essentially flat, and having two slots adapted to engage said joining hooks of adjacent panels.

7. The joining clip of claim 6 further comprising support attaching means comprising two opposing hooks having essentially flat portions spaced apart from and parallel to said flat surface defining a T shaped keyway adapted for receiving a cooperating T shape portion of a support bracket.

8. The materials retaining berm system of claim 1 further comprising at least one support means to resist overturning

and sliding forces, said support means comprising a gusset portion having at least three edges, first and second essentially flat portions fixedly attached to each of two adjacent edges where the first flat portion in cooperation with the gusset comprises a T shaped means adapted to cooperate with said T shaped keyway for removably attaching the support means to the said elongated panel, and where the second flat portion in cooperation with the gusset comprises a foot for supporting the said overturning and sliding forces.

9. The foot of claim 8 further comprising ground attachment means comprising at least one hole in said foot and at least one nail through said hole and penetrating the ground, thereby pinning the foot to the ground to resist sliding and overturning forces.

10. The materials retaining berm system of claim 1 further comprising at least one support means to resist overturning and sliding forces, said support means comprising a gusset portion having at least three edges, one edge fixedly attached to said first panel face, and a flat portion approximately perpendicular to the gusset portion where the flat portion in cooperation with the gusset comprises a foot for supporting the said overturning and sliding forces.

11. A materials retaining berm system comprising:

- a. at least three elongated panels each having a top edge, bottom edge, first and second faces, first and second ends, and first and second joining hooks located on the first face at said first and second ends; and
- b. said joining hooks further comprising a portion fixedly attached to and extending from said first panel face and an essentially flat surface portion fixedly attached to the distal edge of said extending joining hook portion and spaced apart from and parallel to said first panel face thereby forming a pocket for receiving a joining clip; and
- c. at least three joining clips for removably joining two said panels thereby forming a corner of said retaining berm, said joining clips having two essentially flat portions fixedly connected to form a dihedral angle, and first and second slots near the distal edges of said flat portions each adapted to engage said extending portion of the joining hooks of adjacent panels and where the joining clips are restrained by said pockets; and
- d. a flexible liner comprising a least one flexible sheet folded to essentially conform to the shape of said enclosed space, said liner being attached to said upper edges of each panel by at least one elastic clip, where said attachment extends substantially along the entire upper edge of said panel, and
- e. whereby said panels connected by said joining clips define an enclosed space having a bottom and side wall liner for retaining materials therein.

12. The materials retaining berm system of claim 11 where said panels further comprising of at least one elongated hole near said top edge for carrying and manipulating the panel.

13. The materials retaining system of claim 11, further comprising a support attaching means fixedly attached to said first panel face, said support attaching means comprising two opposing hook having essentially flat portions spaced apart from and parallel to said first panel face thereby defining a T shaped keyway adapted for receiving a cooperating T shaped portion of a support bracket.

14. The materials retaining berm system of claim 11 further comprising a joining clip adapted to join adjacent panels in approximately co-linear arrangement, where the

13

said joining clip is essentially flat, and having two slots adapted to engage said joining hooks of adjacent panels.

15. The joining clip of claim 14 further comprising support attaching means comprising two opposing hooks having essentially flat portions spaced apart from and parallel to said flat surface defining a T shaped key-way adapted for receiving a cooperating T shape portion of a support bracket.

16. The materials retaining berm system of claim 11 further comprising at least one support means to resist overturning and sliding forces, said support means comprising a gusset portion having at least three edges, first and second essentially flat portions fixedly attached to each of two adjacent edges where the first flat portion in cooperation with the gusset comprises a T shaped means adapted to cooperate with said T slot for removably attaching the support means to the said elongated panel, and where the second flat portion in cooperation with the gusset comprises a foot for supporting the said overturning and sliding forces.

17. The foot of claim 16 further comprising ground attachment means comprising at least one hole in said foot and at least one nail through said hole and penetrating the ground, thereby pinning the foot to the ground to resist sliding and overturning forces.

18. The materials retaining berm system of claim 11 further comprising at least one support means to resist overturning and sliding forces, said support means comprising a gusset portion having at least three edges, one edge fixedly attached to said first panel face, and a flat portion approximately perpendicular to the gusset portion where the flat portion in cooperation with the gusset comprises a foot for supporting the said overturning and sliding forces.

19. A materials retaining berm system comprising:

- a. at least three elongated panels each having a top edge, bottom edge, first and second faces, first and second ends, and first and second joining hooks located on the first face at said first and second ends, and at least one support attaching means on the first face between said first and second joining hooks for removably attaching a support bracket adapted to resist overturning and sliding of said panel; and
- b. said joining hooks further comprising a portion fixedly attached to and extending from said first panel face and an essentially flat surface portion fixedly attached to the distal edge of said extending joining hook portion and spaced apart from and parallel to said first panel face thereby forming a pocket for receiving a joining clip; and

14

c. at least three joining clips for removably joining two said panels thereby forming a corner of said retaining berm, said joining clips having two essentially flat portions fixedly connected to form a dihedral angle, and first and second slots near the distal edges of said flat portions, each adapted to engage said extending portion of the joining hooks of adjacent panels and where the joining clips are restrained by said pockets; and

d. a flexible liner comprising a least one flexible sheet folded to conform essentially to the shape of said enclosed space, said liner being attached to said upper edges of each panel by at least one elastic clip, where said attachment extends substantially along the entire upper edge of said panel, and

e. said support attaching means further comprising two opposing hook having essentially flat portions spaced apart from and parallel to said first panel face thereby defining a T shaped keyway adapted for receiving a cooperating T shaped portion of a support bracket; and

f. at least one support means to resist overturning and sliding forces, said support means comprising a gusset portion having at least three edges, first and second essentially flat portions fixedly attached to each of two adjacent edges where the first flat portion in cooperation with the gusset comprises a T shaped means adapted to cooperate with said T shaped keyway for removably attaching the support means to the said elongated panel, and where the second flat portion in cooperation with the gusset comprises a foot for supporting the said overturning and sliding forces; and

g. whereby said panels connected by said joining clips define an enclosed space having a liner for retaining materials therein and support means to resist forces tending to overturn, bend, or slide the panels.

20. The materials retaining berm system of claim 19 where said panels further consisting of at least one elongated hole near said top edge for carrying manipulating the panel.

21. The materials retaining berm system of claim 19 where said foot further comprises ground attachment means comprising at least one hole in said foot and at least one nail through said hole and penetrating the ground, thereby pinning the foot to the ground to resist sliding and overturning forces.

* * * * *